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PATENT  
ATTORNEY DOCKET: 58777.000016

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application Number : 10/827,341 Confirmation No.: 2595  
Applicant : Kazuwa NAKAO  
Filed : April 20, 2004  
Title : THERAPEUTIC AGENTS FOR ACHONDROPLASIA  
TC/Art Unit : 1615  
Examiner: : Unassigned  
  
Docket No. : 58777.000016  
Customer No. : 21967

**Mail Stop Amendment**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**INFORMATION DISCLOSURE STATEMENT**

Sir:

In accordance with 37 C.F.R. §§ 1.97 and 1.98, and in compliance with the duty of disclosure set forth in 37 C.F.R. § 1.56, applicants are submitting herewith copies of the references listed on the attached Form PTO-SB/08A (modified) for consideration and to be made of record herein by the U.S. Patent and Trademark Office in the above-captioned application.

The subject application is a Divisional of U.S. Application No. 10/218,109 (Atty. Docket No. 58777.000016), filed August 14, 2002. In accordance with 37 C.F.R. § 1.98(d), patent documents and published articles which were cited in the prior application are listed on the accompanying Form PTO-SB/08A, but copies of these documents are not enclosed as they were provided in the prior application. However, copies will be forwarded at the Examiner's request.


Consideration of the foregoing plus the prompt return of a copy of the enclosed Form SB/08A with the Examiner's initials in the left column in accordance with MPEP 609 are respectfully requested.

In accordance with 37 C.F.R. § 1.97(b), this Information Disclosure Statement is believed to be submitted prior to issuance of a first Office Action and within three months of the

filing date of the application. Therefore, it is respectfully submitted that no fee is required for consideration of this information. However, in the event any fee is deemed necessary, the Commissioner is authorized to charge the undersigned's Deposit Account No. 50-0206.

Respectfully submitted,

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Dated: 11/22/04 By:   
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JLP/sdw

NOV 19 2004

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> (use as many sheets as necessary)				<b>Application Number</b>	<b>10/827,341</b>
				<b>Filing Date</b>	<b>April 20, 2004</b>
				<b>First Named Inventor</b>	<b>Kazuwa NAKAO</b>
				<b>Art Unit</b>	<b>1615</b>
				<b>Examiner Name</b>	<b>Unassigned</b>
<b>Sheet</b>	<b>1</b>	<b>of</b>	<b>3</b>	<b>Attorney Docket Number</b>	<b>58777.000016</b>

**U.S. PATENT DOCUMENTS**

*Examiner Initials	Cite No.	DOCUMENT NUMBER Number - Kind Code (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	1.	US- 6369295	04-09-2002	Cheah et al.	

**FOREIGN PATENT DOCUMENTS**

*Examiner Initial	Cite No.	FOREIGN PATENT DOCUMENT		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	TRANSLATION	
		Country Code:	Number - Kind Code (if known)				YES	NO
	2.	WO	91/16342	10-31-1991	Matsuo		<input type="checkbox"/>	<input checked="" type="checkbox"/>
	3.	JP	04-074198 (Abstract)	03-09-1992	Toshiyuki et al.		<input checked="" type="checkbox"/>	<input type="checkbox"/>
	4.	JP	04-120094 (Abstract)	04-21-1992	Toshiyuki et al.		<input checked="" type="checkbox"/>	<input type="checkbox"/>
	5.	JP	04-120095 (Abstract)	04-21-1992	Toshiyuki et al.		<input checked="" type="checkbox"/>	<input type="checkbox"/>
	6.	JP	04-139199 (Abstract)	05-13-1992	Toshiyuki et al.		<input checked="" type="checkbox"/>	<input type="checkbox"/>
	7.	JP	06-009688 (Abstract)	01-18-1994	Masaharu et al.		<input checked="" type="checkbox"/>	<input type="checkbox"/>
	8.	WO	02/074234	09-26-2002	Golembo et al.		<input checked="" type="checkbox"/>	<input type="checkbox"/>

**NON-PATENT LITERATURE DOCUMENTS**

*Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	TRANSLATION	
			YES	NO
	9.	CHINKERS et al., "Signal transduction by guanylyl cyclases," Annu. Rev. Biochem. <b>60</b> , pp. 553-575 (1991)	<input type="checkbox"/>	<input type="checkbox"/>
	10.	CHUSHO et al., "Dwarfism and early death in mice lacking C-type natriuretic peptide," Proc. Natl. Acad. Sci. U.S.A. <b>98</b> , pp. 4016-4021 (2001)	<input type="checkbox"/>	<input type="checkbox"/>
	11.	HAGIWARA et al., "Autocrine regulation of rat chondrocyte proliferation by natriuretic peptide C and its receptor, natriuretic peptide receptor-B," J. Biol. Chem. <b>269</b> , pp. 10729-10733 (1994)	<input type="checkbox"/>	<input type="checkbox"/>
	12.	INOUE et al., "Reciprocal regulation by cyclic nucleotides of the differentiation of rat osteoblast-like cells and mineralization of nodules," Biochem. Biophys. Res. Commun. <b>215</b> , pp. 1104-1110 (1995)	<input type="checkbox"/>	<input type="checkbox"/>

EXAMINER SIGNATURE

DATE CONSIDERED

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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<b>Sheet</b>	2	<b>of</b>	3	<b>Attorney Docket Number</b> 58777.000016		
<b>NON-PATENT LITERATURE DOCUMENTS</b>						
	13.	KOJIMA et al., "Cloning and sequence analysis of a cDNA encoding a precursor for rat C-type natriuretic peptide (CNP)," FEBS Lett. <b>276</b> , pp. 209-213 (1990)			<input type="checkbox"/>	<input type="checkbox"/>
	14.	KOLLER et al., "Selective activation of the B natriuretic peptide receptor by C-type natriuretic peptide (CNP)," Science <b>252</b> , pp. 120-123 (1991)			<input type="checkbox"/>	<input type="checkbox"/>
	15.	KOMATSU et al., "C-type natriuretic peptide (CNP) in rats and humans," Endocrinology <b>129</b> , pp. 1104-1106 (1991)			<input type="checkbox"/>	<input type="checkbox"/>
	16.	KOMATSU et al., "Regulation of endothelial production of C-type natriuretic peptide in coculture with vascular smooth muscle cells," Circ. Res. <b>78</b> , pp. 606-614 (1996)			<input type="checkbox"/>	<input type="checkbox"/>
	17.	MERICQ et al., "Regulation of fetal rat bone growth by C-type natriuretic peptide and cGMP," Pediatr. Res. <b>47</b> , pp. 189-193 (2000)			<input type="checkbox"/>	<input type="checkbox"/>
	18.	METSÄRANTA et al., "Developmental expression of a type II collagen/ $\beta$ -galactosidase fusion gene in transgenic mice," Dev. Dyn. <b>204</b> , pp. 202-210 (1995)			<input type="checkbox"/>	<input type="checkbox"/>
	19.	MINAMINO et al., "N-terminally extended form of C-type natriuretic peptide (CNP-53) identified in porcine brain," Biochem. Biophys. Res. Commun. <b>170</b> , pp. 973-979 (1990)			<input type="checkbox"/>	<input type="checkbox"/>
	20.	MUKOYAMA et al., "Brain natriuretic peptide as a novel cardiac hormone in humans," J. Clin. Invest. <b>87</b> , pp. 1402-1412 (1991)			<input type="checkbox"/>	<input type="checkbox"/>
	21.	NASIKI et al., "Repression of hedgehog signaling and BMP4 expression in growth plate cartilage by fibroblast growth factor receptor 3," Development <b>125</b> , pp. 4977-4988 (1998)			<input type="checkbox"/>	<input type="checkbox"/>
	22.	OGAWA et al., "Molecular cloning of the complementary DNA and gene that encode mouse brain natriuretic peptide and generation of transgenic mice that overexpress the brain natriuretic peptide gene," J. Clin. Invest. <b>93</b> , pp. 1911-1921 (1994)			<input type="checkbox"/>	<input type="checkbox"/>
	23.	ROSENZWEIG et al., "Atrial natriuretic factor and related peptide hormones," Annu. Rev. Biochem. <b>60</b> , pp. 229-255 (1991)			<input type="checkbox"/>	<input type="checkbox"/>
	24.	ROUSSEAU et al., "Mutations in the gene encoding fibroblast growth factor receptor-3 in achondroplasia," Nature <b>371</b> , pp. 252-254 (1994)			<input type="checkbox"/>	<input type="checkbox"/>
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<b>NON-PATENT LITERATURE DOCUMENTS</b>								
	25.	SHIANG et al., "Mutations in the transmembrane domain of FGFR3 cause the most common genetic form of dwarfism, achondroplasia," Cell <b>78</b> , pp. 335-342 (1994)					<input type="checkbox"/>	<input type="checkbox"/>
	26.	SHUKUNAMI et al., "Cellualr hypertrophy and calcification of embryonal carcinoma-derived chondrogenic cell line ATDC5 in vitro," J. Bone. Miner. Res. <b>12</b> , pp. 1174-1188 (1997)					<input type="checkbox"/>	<input type="checkbox"/>
	27.	STAMOYANNOU et al., "Growth and growth hormone therapy in children with achondroplasia: a two-year experience," American Journal Of Medical Genetics <b>72</b> , pp. 71-76 (1997)					<input type="checkbox"/>	<input type="checkbox"/>
	28.	SUDA et al., "C-type natriuretic peptide as an autocrine/paracrine regulator of osteoblast," Biochem. Biophys. Res. Commun. <b>223</b> , pp. 1-6 (1996)					<input type="checkbox"/>	<input type="checkbox"/>
	29.	SUDA, "Skeletal overgrowth in transgenic mice that overexpress brain natriuretic peptide," Proc. Natl. Acad. Sci. U.S.A. <b>95</b> , pp. 2337-2342 (1998)					<input type="checkbox"/>	<input type="checkbox"/>
	30.	SUDOH et al., "A C-type natriuretic peptide (NP): new member of natriuretic peptide family identified porcine brain," Biochem., Biophys. Res. Commun. <b>168</b> , pp. 863-870 (1990)					<input type="checkbox"/>	<input type="checkbox"/>
	31.	TANAKA et al., "Effect of growth hormone therapy in children with achondroplasia: growth pattern, hypothalamic-pituitary function, and genotype," European Journal of Endocrinology <b>138</b> , pp. 275-280 (1998)					<input type="checkbox"/>	<input type="checkbox"/>
	32.	YASODA et al., "Natriuretic peptide regulation of endochondral ossification," J. Biol. Chem. <b>273</b> , pp. 11695-11700 (1998)					<input type="checkbox"/>	<input type="checkbox"/>
	33.	YASODA et al., Abstract for the 72th Congress of the Japan Endocrine Society <b>74</b> , p. 87 (1999)					<input type="checkbox"/>	<input type="checkbox"/>
							<input type="checkbox"/>	<input type="checkbox"/>
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